#### STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION





PATRICIA W. AHO COMMISSIONER

City of Augusta – Hatch Hill Landfill **Kennebec County** Augusta, Maine A-1060-71-D-M

**Departmental** Findings of Fact and Order **Air Emission License** Amendment #2

## FINDINGS OF FACT

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes Annotated (M.R.S.A.), §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

#### I. REGISTRATION

#### A. Introduction

- 1. The City of Augusta Hatch Hill Landfill (Hatch Hill) was issued Air Emission License A-1060-71-A-N on October 5, 2011 permitting the operation of emission sources associated with their landfill facility. The license was subsequently amended on May 1, 2014 (A-1060-71-C-M).
- 2. Hatch Hill has requested a minor revision to their license to revise the requirement of Condition (18) for monthly landfill gas emission testing, to annual testing.
- 3. The equipment addressed in this license is located at Hatch Hill Road, Augusta, ME.

#### B. Emission Equipment

The following equipment is addressed in this air emission license:

#### **Process Equipment**

<u>Equipment</u>	Design Capacity	Production Rate	Stack #
Landfill Gas Flare	7.5 MMBtu/hr	300 scfm	1

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### C. Application Classification

This amendment will not increase emissions from the landfill, therefore, this modification is determined to be a minor revision and has been processed as such.

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### II. BEST PRACTICAL TREATMENT (BPT)

#### A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

#### B. Explanation of Minor Revision Request

The City of Augusta owns and operates a municipal solid waste landfill, which includes an active landfill gas management system designed to control buildup of landfill gas beneath the cover system necessary for landfill closure and to prevent fugitive emissions of pollutants. The gas management system includes 12 landfill gas extraction wells and a landfill gas flare.

In accordance with Specific Condition (18) of air emission license A-1060-71-A-N, Hatch Hill has sampled the landfill gas monthly for total sulfur (as hydrogen sulfide) six (6) times starting in March 2014. As demonstrated in documentation which accompanied the license amendment application, the hydrogen sulfide content of the landfill gas has remained consistently below licensed limits, ranging from 32.7 ppmv to 64.3 ppmv (parts per million by volume). Expressed as sulfur dioxide (SO<sub>2</sub>) pound per hour (lb/hr) values, emission rates ranged from 0.021 to 0.080 lb/hr. The license limit for SO<sub>2</sub> is 0.3 lb/hr.

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Hatch Hill requests a minor revision of the current license requirement for testing of SO<sub>2</sub> emission limits on a monthly basis, to testing on an annual basis

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The BACT analysis for the landfill gas collection system and flare, submitted with the application for the initial air emission license, will not be affected by the requested minor revision.

### III.AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

<u>Pollutant</u>	Tons/Year	
$PM_{10}$	25	
$SO_2$	50	
NO <sub>x</sub>	50	
CO	250	

The total facility licensed emissions are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license amendment.

#### **ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-1060-71-D-M subject to the conditions found in Air Emission License A-1060-71-A-N, in amendment A-1060-71-C-M, and in the following conditions:

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<u>Severability</u>. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

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# SPECIFIC CONDITION (18) OF AIR EMISSION LICENSE A-1060-71-A-N SHALL BE DELETED AND REPLACED BY THE FOLLOWING CONDITION:

(18) Land Fill Gas Sampling and Testing

Hatch Hill shall sample the land fill gas, and test for Hydrogen Sulfide (H<sub>2</sub>S), using the resulting values to determine compliance with the license Sulfur Dioxide (SO<sub>2</sub>) limit, on an annual basis.

DONE AND DATED IN AUGUSTA, MAINE THIS 10 DAY OF December , 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Ulen Robert Come for PATRICIA W. AHO, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-1060-71-A-N.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/27/2014 Date of application acceptance: 10/27/2014

Date filed with the Board of Environmental Protection:

This Order prepared by N. Lynn Cornfield, Bureau of Air Quality.

Piled

DEC 11 2014

State of Maine
Board of Environmental Protection